

**ABSTRACT OF THE DISCLOSURE**

A motor control system includes a control section that performs operating range limiting processing in which a junction  
5 temperature of switching element of an electric power converter is calculated and compared with a preset temperature limit, and when the junction temperature exceeds the temperature limit, junction temperature reduction processing is performed to make the junction temperature equal to or less than the temperature  
10 limit, whereby the switching elements can effectively used to their maximum temperature limit irrespective of a temperature detected by a temperature sensor, thus expanding the operating range of a motor.